The Modified Nucleosides of Transfer RNA, II

A Laboratory Manual of Genetic Analysis, Identification, and Sequence Determination

Edited by P.F. Agris and R.A. Kopper

Alan R. Liss; New York, 1983
310 pages. £29.00

This book deals with various aspects of biochemistry of transfer RNAs with special attention to modified nucleosides. It comprises two types of papers written by different authors: reviews or compilations and experimental procedures. Amongst the first type is a very interesting review about the genetics of modified nucleosides in tRNAs. It gives the known mutations leading to modification defects and their influence on tRNA function. Other papers compile the mass spectra of major and modified nucleosides and the transfer RNA sequences both in the cloverleaf and linear sequences. The list of the linear sequences is a copy of what already appeared in Nucleic Acids Research in 1982.

An interesting bibliography about all that has been published in the modified nucleoside field of tRNAs up to 1982 is also given. The two technical papers deal with sequence analysis of in vitro ^{32}P-labeled RNAs and with quantitative RP-HPLC analysis of tRNAs for major and minor nucleosides. This book is a useful laboratory manual for all those working in the field of tRNA structure and role.

G. Dirheimer

Biochemical and Clinical Aspects of Pteridines: Volume 1

Cancer Immunology Metabolic Diseases

Edited by H. Wachter, H.Ch. Curtius and W. Pfleiderer

Walter de Gruyter; Berlin, 1982
xv + 372 pages. DM 150

This book records the proceedings of a workshop attended by scientists from Austria, France, Germany and Switzerland. Interest in pteridines has been limited by difficulties in assay of those substances which was based on microbiological assay with a trypanosome, *Crithidia fasciculata* or by a phenylamine hydroxylase assay. Latterly, these have been replaced by HPLC preceded by a somewhat tedious preparation of material and, currently, by a more acceptable radioimmunoassay.

Mammals appear able to synthesise their own pteridines from guanidine triphosphate, the initial pyrimidine derivative formed in the presence of GTP-cyclohydrolase, being converted to dihydroneopterin and dihydrobiopterin. Tetrahydrobio-